

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-18040-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 25.05.2020

Date of issue: 25.06.2020

Holder of certificate:

**CleanControlling GmbH
Labor für Technische Sauberkeit**

at the locations:

**Gehrenstraße 11 a, 78576 Emmingen-Liptingen
Lockwitzgrund 100, 01257 Dresden**

Tests in the fields:

Examination of Technical Cleanliness on metallic and non-metallic materials, components, systems and fluids using the test methods of extraction, gravimetry, microscopical analysis, infrared spectroscopy and ion chromatography

The laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standard test methods listed here with different issue dates or revision status up-dates. The testing laboratory maintains a current list of all testing within the flexible scope of accreditation.

The test procedures are identified with the symbols listed below for the locations at which they are carried out:

D= Dresden

E = Emmingen - Liptingen

Abbreviations used: see last page

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.
<https://www.dakks.de/en/content/accredited-bodies-dakks>*

Examination of Technical Cleanliness with test methods of extraction, gravimetry, or microscopic analysis

ISO 16232 2018-12	Road vehicles - Cleanliness of components of fluid circuits (except: 9.3 - 9.4)	E, D
ISO 4405 1991-05	Hydraulic fluid power - Fluid contamination - Determination of particulate contamination by the gravimetric method	E, D
ISO 4406 1999-12	Hydraulic fluid power - Fluids - Method for coding the level of contamination by solid particles	E
ISO 4407 2002-04	Hydraulic fluid power - Fluid contamination - Determination of particulate contamination by the counting method using an optical microscope	E
VDA Band 19.1 2015	Inspection of Technical Cleanliness - Particulate Contamination of Functionally Relevant Automotive Components (except: 8.3 - 8.4)	E, D

Examination / identification of unknown substances in organic or inorganic materials with infrared spectroscopy (FTIR)

ASTM E 1252 2013	Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis	E
---------------------	--	---

Examination of components with test methods of ion chromatography

DIN EN ISO 14911 1999-12	Water quality - Determination of dissolved Li ⁺ , Na ⁺ , NH ₄ ⁺ , K ⁺ , Mn ²⁺ , Ca ²⁺ , Mg ²⁺ , Sr ²⁺ and Ba ²⁺ using ion chromatography - Method for water and waste water	E
DIN EN ISO 10304-1 2009-07	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 1: Determination of bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulfate	E
IPC-TM-650 2.3.25 2012-11	Detection and Measurement of Ionizable Surface Contaminants by Resistivity of Solvent Extract (ROSE)	E

Annex to the accreditation certificate D-PL-18040-01-0000

IPC-TM-650 2.3.25.1 2000-09	Ionic Cleanliness Testing of Bare PWBs	E
IPC-TM-650 2.3.28 2012-11	Ionic Analysis of Circuit Boards, Ion Chromatography Method	E
IPC-TM-650 2.3.28.2 2009-12	Bare Printed Board Cleanliness by Ion Chromatography	E

Abbreviations used:

ASTM	American Society for Testing and Materials
IPC	Association for standardization of electronic equipment
ISO	International Organization for Standardization
VDA	German Association of the Automotive Industry